

NBC Equipment

M-41 Protection Assessment Test System (PATs)

If your unit has an M-41 PATS assigned it must be used as the primary means of initially fitting soldiers with protective masks and on an annual basis thereafter. The banana oil test and the CS Chamber should be used as an alternate means of testing and fitting masks. The NBC representative must ensure the M-41 PATS is reported to the unit Test, Measurement, and Diagnostics Equipment (TMDE) representative to ensure calibration remains current. More information can be found in TC 3-41, Chapter 2, TB 43-180 and TM 3-4240-349-12&P.

Chemical-Biological Protective Mask for Hard-To-Fit Service Members

The following information was taken from TB 3-4240-341-20-1.

For complete information, see Technical Bulletin.

A small percentage of service members cannot be properly fitted with the authorized protective mask. In the past we used subjective means of verifying fit: e.g.; Banana Oil. The M41 Protection Assessment Test System (PATs) provides an objective measurement of proper fit, or “fit factor” so we are able to more effectively determine if service members have a properly fitting mask.

This technical bulletin provides specific guidance and information to unit NBC personnel to insure that service members are properly assessed for the fit of their mask. It also addresses the options available to provide an acceptable level of protection for those who cannot be fitted with the unit’s authorized mask.

Hard-to-Fit service members are usually those at the very top (large) and very bottom (x-small) of the sizing tariff.

Procedures for determining if a service member cannot be fitted with the authorized protective mask are as follows:

- Conduct Preventive Maintenance Checks and Services (PMCS) on the service member’s mask using the appropriate Technical Manual or Technical Order.
- Test the service member’s mask fit in accordance with the technical equipment publication for the M42 PATAS or service approved test method.
- If the service member again fails to get a “Pass”, he/she is then considered a Hard-to-Fit service member. Hard-to-Fit service member’s provide the unit commander with the following choices when the unit is a deployable unit:

- Declare the service member as NON-DEPLOYABLE per AR 600-8-101, Change 2, paragraph 4.7.h.(2) (for Army units) or service specific regulation.
- Acquire the M45 CB Mask and attempt to properly fit the service member.

Procedures for Acquiring M45 masks for hard-to Fit Service Members are as follows:

- Once the service member is identified as a Hard-to-Fit, acquire the following information:
 - Service Member's name, Rank, SSN, and job title.
 - The normal wear configuration the service member uses (e.g. Canister mounted on the face-piece or hose or whether the service member fires their individual weapon RIGHT-HANDER OR LEFT-HANDED).
 - Communication requirement, if any.
 - Type of protective over-garment the service member is issued (e.g. Battle Dress Over-garment (BDO) or Joint Service Lightweight Intergrated Suit Technology (JSLIST)).
 - Forward information to the division, or appropriate Chemical Officer/NCO.
 - The unit Chemical Officer/NCO will telephone or FAX the information above to the SBCCOM Logistics Operations Center at the following numbers:
 - VOICE TELEPHONW: DSN 256-4005/4060, Commercial: (508) 233-4005/4060
 - Facsimile (FAX): DSN 256-4471, Commercial (508) 233-4471
 - Email address: AMSSB-RIM-E@natick.army.mil
 - Mailing address" SBCCOM Logistics Operations Center, ATTN: AMSSB-RIM-E, Natick, MA 01760-5052
 - Additionally, provide the following:
 - COMPLETE unit mailing address to include Unit Identification Code (UIC) and Department of Defense Activity Address Coded (DODAAC).
 - A statement signed by the unit commander including the Commander's full name, rank, and telephone number. This ensures that the procedure listed above has been completed and the service member(s) are verified as hard-to-fit.
 - Based on information provided above, the SBCCOM Logistics Operations Center will provide a list of what the unit needs to operate and maintain the M45 mask.

Action after receipt of the M45 mask will be as follows:

- Provide a copy of receipt documentation by FAX (see above for number) or mail to: SBCCOM Logistics Operations Center, ATTN: AMSSB-RIM-E, Natick, MA 01760-5060.
- Fit the individual in accordance with Section III, TM 3-4240-341-20&P.
- Test the service member's mask interface by employing the M41 PATS and the same procedure used to determine that he/she was "Hard-to-Fit".
- If the individual/M45 mask system passes the test, issue the mask to him/her. If a failure occurs, contact the SBCCOM.

M45 Masks are issued to service members as Individual Equipment. A certified Hard-to-Fit service member retains possession of their mask as they transfer between duty stations. Unlike most masks, the M45 mask authorization for Hard-to-Fit service members is documented in the Common Table of Allowances (CTA 50-900), Clothing and Individual Equipment, 1 Sep 1994, and not in the units' Modified Table of Organization and Equipment (MTOE), Modified Table of Distribution and Allowances (MTDA)(Army), or service specific authorization documents.

Since each Hard-to-Fit service member is custom fitted with his/her mask, the service member retains possession of the mask until he/she terminates service. Service members are responsible for the proper safeguarding of the masks as well as proper maintenance. Upon change of stations, the service member retains possession of the mask and arrives with it at the next station. During out-processing, the losing issue point validates on the service member's Clothing and Individual Equipment Record that the mask is present. The mask and record accompany the service member to his/her new duty station. Upon arrival, the service member reports to the gaining issue point for in-processing during which an inventory is conducted showing the mask is present and the Clothing and Individual Equipment Record is validated where upon the mask is officially transferred to the gaining issue point. **THE SERVICE MEMBER RETAINS POSSESSION OF THE MASK.**

Upon receipt of the masks for hard-to-Fit service members, formal accountability documenting the issue of these masks to the individual will occur. Masks for hard-to-Fit service members are not stocked as Authorized Stockage List (ASL) at the unit issue point nor are they used as sizing floats. Masks are accounted for using formal procedures in the appropriate service regulation. For Army units, DA PAM 710-2-1 provides these procedures. Accountability transfers when the individual processes out in route to a new unit.

Maintaining the M45 assigned to Hard-to-Fit service members is the responsibility of the unit to which the service member is assigned. Technical Manuals TM 3-4240-341-10 and TM 3-4240-341-20&P contain operator and unit maintenance for the Mask, Chemical-Biological" M45. Technical manuals TM 3-4240-348-10 and TM 3-4240-348-20&P contain operator and unit maintenance for the Mask, Chemical-Biological: land Warrior, M45. Requirements for repair parts to support M45 hard-to-Fit masks shall cite Project Code GDF.